

Q¹⁴ wherein the network components have connectivity to a common data network.

REMARKS

By way of the present amendment, claims 1-14, and 16-35 are pending, with claim 15 cancelled, with claims 1, 3, 6-10, 13, 14, and 16-19 amended, and with claims 30-35 added, without the introduction of new matter (see, e.g., FIG. 2, and Specification pp. 11-15).

The Office Action mailed June 27, 2002, requested a copy of the IDS filed September 2, 1998, rejected claims 6 under 35 U.S.C. § 112, second paragraph, based on a finding of indefiniteness, claims 1, 6, 13, 16 and 17 under 35 U.S.C. § 102(e) as being anticipated by *Herbert* (US 5,826,030), claims 2-4, 7-9, 12, 14, 18-20, 23-27, and 29 under 35 U.S.C. § 103(a) as being unpatentable over *Dickerman et al.* (US 6,188,761) in view of *Herbert*, claims 10, 15, and 21 under 35 U.S.C. § 103(a) as being unpatentable over *Dickerman et al.* and *Herbert* in view of allegedly admitted prior art (APA), claims 5, 11, and 22 under 35 U.S.C. § 103(a) as being unpatentable over *Dickerman et al.* and *Gottlieb* (US 5,920,621) in view of *Herbert*, and claim 28 under 35 U.S.C. § 103(a) as being unpatentable over *Dickerman et al.* and *Sherman et al.* (US 6,108,337) in view of *Herbert*. The present application, *Dickerman et al.*, *Gottlieb*, and *Sherman et al.* are all commonly assigned to MCI.

In response to the request for a copy of the IDS filed September 2, 1999, the same has already been submitted or will be submitted hereafter.

In response to the rejection of claim 6 under 35 U.S.C. § 112, claim 6 has been amended to correct the noted informality. In addition, the specification and claims 1, 3, 6-10, 13, 14, and 16-19 have been amended to correct discovered informalities and new claims 30-40 have been added. No new matter is introduced and all of the present claims are in compliance with 35 U.S.C. § 112.

The rejection of claims 2-5, 7-12, 14, 15, and 18-29 is respectfully traversed, because *Dickerman et al.*, *Gottlieb*, and *Sherman et al.* cannot preclude patentability for obviousness in light of the recent enactment of the American Inventors Protection Act (AIPA), Pub. L. 106-113, § 4807, effective for all applications filed on or after November 29, 1999. As amended, 35 U.S.C. § 103(c) provides:

(c) Subject matter developed by another person, which qualifies as prior art only under subsection (e), (f), or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention as made, owned by the same person or subject to an obligation of assignment to the same person.

The present application is a CPA filed after the November 29, 1999 enactment date of this provision of the AIPA and is therefore entitled to benefit from the AIPA's prior art exclusion for certain commonly assigned patents. The present application has a filing date of June 12, 1998, which is before the February 13, 2001 issue date of *Dickerman et al.*, the July 6, 1999 issue date of *Gottlieb*, and the August 22, 2000 issue date of *Sherman et al.* Thus, *Dickerman et al.*, *Gottlieb*, and *Sherman et al.* would qualify as prior art only under subsections (e), (f), or (g) of § 102. Since both the present application and *Dickerman et al.*, *Gottlieb*, and *Sherman et al.* are commonly assigned (to MCI), the use of *Dickerman et al.*, *Gottlieb*, and *Sherman et al.* in the obviousness rejection is disallowed by law.

Turning now to the rejection of claims 1, 6, 13, 16 and 17, claim 1 has been amended to recite a feature from claim 3, claim 15 has been cancelled, and claims 3, 6, 13, 16, and 17 have been amended to correct discovered informalities and so as to depend from amended claim 1. Claims 2-14 and 16-19 depend from amended claim 1, which recites "a switch controller coupled to said programmable switch, and including **a service control means for interfacing with an**

intelligent service network component of said intelligent service network,” and which as acknowledged in the present Office Action is not disclosed by *Herbert* (“Excel Inc.”).

Specifically, the present Office Action, at page 7, admits that “Excel Inc. does not appear to explicitly teach the claimed ‘... switch controller ... service control means for interfacing with said intelligent services network component ...’” The present Office Action relies on *Dickerman et al.*, for the claimed “service control means,” which as noted above cannot be used in an obviousness rejection. Accordingly, claims 1-14 and 16-19 are allowable over *Herbert* and *Dickerman et al.* (and/or *Gottlieb* and/or *Sherman et al.*).

Dependent claim 6, 13, 16, and 17, are allowable over *Herbert* on their own merits and for at least the reasons as argued above with respect to amended independent claim 1.

Turning now to new claims 30-35, new independent claim 30 is directed to a communication system for providing telecommunication services and independent claim 35 is directed to method for processing a call in a telecommunications system. Notably, independent claim 30 recites:

a switch controller configured to generate the program instructions to the switch for distributing the call to a plurality of network components based on availability of the network components, wherein the network components and the switch controller are connected over a common data network; and

independent claim 35 recites:

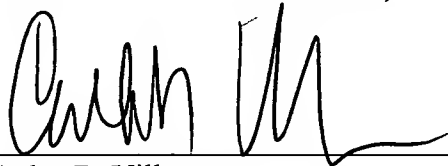
transmitting program instructions to the switch for answering a call received by the switch from a telephony network and for **selectively distributing the call to one of the ports corresponding to the network components** based on availability of the network components, wherein the network components have connectivity to a common data network.

Herbert is directed to a universal host 130 to switch 110 applications program interface (API), but otherwise fails to satisfy these features. New independent claims 30 and 35, and their dependent claims, should thus be indicated as allowable.

Favorable consideration of this application is respectfully requested. If any unresolved issues remain, it is respectfully requested that the Examiner telephone the undersigned attorney at 703-425-8501 so that such issues may be resolved as expeditiously as possible.

Respectfully Submitted,

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APPENDIX**IN THE SPECIFICATION:**

Please amend the specification, as follows:

Page 6, last full paragraph, lines 14-22:

--FIG. 1 is a block diagram of an intelligent service network (ISN) environment 102 according to one embodiment of the present invention. The switch controllers 112 within the ISNs 108 provide access for a call initiated via PSTN 106 to ISN components 116a, 116b, ...116n (116) also within ISNs 108. Switch controllers 112 are described in further detail in copending U.S. Patent Application [Attorney Docket No. CDR-97-029 (1575.2980000)] Serial No. 09/096,938, now allowed, entitled, "Switch Controller" incorporated herein by reference. Except as otherwise noted, when elements of the ISNs 108 are referred to generally, they will be referred to with a number designation and not a letter designation.--;

Page 12, last paragraph spanning to page 13, page 12, line 27 to page 13, line 10:

--The ISN components 116 also include protocol converters 232a, 232b, ... 232n that convert between various telecommunications protocols. Protocol converters 232 provide protocol conversion between different protocols such as TCP/IP, NSPP on top of UDP/IP, and packet switching protocols, such as X.25. Exemplary components that perform protocol conversion are the advanced intelligent network gateway (AIN) described in U.S. Patent Application [Attorney Docket No. CDR-96-009 (1575.2240000)] Serial No. 08/967,339, now US Patent 6,229,819, entitled, "Advanced Intelligent Network Gateway" and the validation gateway described in U.S. Patent Application [Attorney Docket No. CDR-96-011 (1575.2250000)] Serial No. 08/956,220, now US Patent 6,160,874, entitled, "Validation Gateway," incorporated herein

by reference. Both components are described in more detail with respect to FIG. 3. The capabilities of the components described in the previously referenced applications are not limited by the examples given and are defined by the scope of the claims in the applications.--;

Page 14, first paragraph, lines 1-5:

--Additional information concerning ISN components 116 is provided in copending U.S. Patent Application [Attorney Docket No. CDR-96-008 (1575.2230000)] Serial No. 08/956,232, now US Patent 6,188,761, entitled, "A System and Method for Providing Operator and Customer Services for Intelligent Overlay Networks," incorporated herein by reference.--;

Page 15, first full paragraph, lines 6-24:

--The ISN network integration functionality 302 is provided by interconnecting an exemplary ISN 108A via protocol converters 232 to other networks. Two exemplary protocol converters are the AIN gateway 308 and the validation gateway 310 described in the above-referenced applications. The AIN gateway 308 is interconnected to TCP/IP networks 312, such as the Internet. The validation gateway 310 is interconnected to packet switching networks 314, such as X.25 networks. A caller placing a call via telephony circuits of the PSTN 106 using telephone 304a, personal computer 306a, or any other calling device may interconnect to an individual using a personal computer on the internet 318, a university database 316, or any other internet network element via the AIN gateway 308 on ISN 108A. The caller, again placing a call via telephony circuits of the PSTN 106 using telephone 304a, personal computer 306a, or any other calling device may interconnect to the database of a financial institution 320 or any other database on a packet switching network 314 such as the X.25 network. The capabilities of the

AIN gateway 308 and the validation gateway 310 are not limited by the examples given and are defined by the scope of the claims in the previously referenced applications U.S. Patent Application [Attorney Docket No. CDR-96-009 (1575.2240000)] Serial No. 08/967,339, now US Patent 6,229,819, and U.S. Patent Application [Attorney Docket No. CDR-96-011 (1575.2250000)] Serial No. 08/956,220, now US Patent 6,160,874.--;

Page 20, last paragraph spanning to page 21, page 20, line 27 to page 21, line 17:

--The programmable switch support function 604 provides an interface between the switch controller 112A and the programmable switch 110A. The programmable switch support function 604 translates messages between a generic switch controller SCAPI message format and programmable switch API message format, manages message header/trailer requirements, and controls connectivity to the programmable switch 110. The generic switch controller SCAPI message format is the messaging among the routines of the switch controller application program 602 within the switch controller 112. The SCAPI messaging is described in further detail in U.S. Patent Application [Attorney Docket No. CDR-97-030 (1575.2990000)] Serial No. 09/096,937, incorporated by reference herein. The programmable switch support function 604 also hides the switch-specific interface details, such as API message framing, checksum, retries, sequence numbers. In addition, the programmable switch support function 604 encodes and decodes the matrix specific message set; extracts call processing information from the messages; encodes/decodes the messages in the generic Switch Controller API (SCAPI) format before passing them to the call control function 606. The programmable switch support function 604 also monitors the health of the switch interface and passes the alarms generated on this interface to the appropriate routines within the Switch Controller. The programmable switch support function 604 implements logic that is required for successful communication with the

programmable switch 110.--;

Page 23, last paragraph spanning to page 24, page 23, line 25 to page 24, line 5:

--The resource control function 208 includes two processes. The first is the system control process 624 , which is in charge of monitoring the states of a call and service-related resources. This system control process 624 is centrally aware of the resource state and general health of the switch controller. The second is the resource management process 622. Exemplary switch controller resource management functionality includes management of both system-related resources such as message queues and a call data block table, as well as network resources such as the programmable switch matrices and agent resources. The resource management process 622 is described in further detail in copending U.S. Patent Application[, Attorney Docket No. CDR-97-031 (1575.3000000)] Serial No. 09/096,939 entitled, "A System and Method for Resource Management" referenced above.--; and

Page 24, second full paragraph, lines 16-18:

--All of the routines within the switch controller application program 602 will be described in further detail in U.S. Patent Application [Attorney Docket No. CDR-97-029 (1575.2980000)] Serial No. 09/096,938, now allowed, referenced above.--.

IN THE CLAIMS:

Please cancel claim 15, without prejudice or disclaimer, amend claims 1, 3, 6-10, 13, 14, and 16-19, and add new claims 30-35, as follows:

--1. (Once Amended) An intelligent service network, comprising:

a programmable switch; and

a switch controller coupled to said programmable switch, and including a service control means for interfacing with an intelligent service network component of said intelligent service network.

3. (Once Amended) The intelligent service network of claim [2] 1, wherein said switch controller further comprises:

a programmable switch support means for providing an interface to said programmable switch; and

a call control means for establishing a connection between [two] ports on said programmable switch[; and

a service control means for interfacing with said intelligent service network component].

6. (Once Amended) The intelligent service network of claim 1, wherein said programmable switch [is one of: a programmable switch; or] includes a digital exchange.

7. (Once Amended) The intelligent service network of claim 2, wherein said intelligent service network component [is] comprises one of[: a manual] an operator console₁[;] an automated response unit₁[;] a service switching control point₁[; or] and a protocol converter.

8. (Once Amended) The intelligent service network of claim 2, wherein said intelligent service network component [is] comprises one of[:] a means for [access] accessing data₁[; or] and a means for interfacing with a caller.

9. (Once Amended) The intelligent service network of claim 2, wherein said intelligent service network component [is] comprises one of[:] a network information distribution system database coupled to said switch controller via a network information distribution system server₁[;] an applications database₂[;] a data distribution system database₃[; or] and a mainframe database.

10. (Once Amended) The intelligent service network of claim [2] 1, further comprising:
a system management system coupled to said switch controller.

13. (Once Amended) [An] The intelligent service network of claim 1, further comprising:

[a plurality of] another programmable [switches; and] switch [a switch controller]
coupled to said [plurality of programmable switches] switch controller.

14. (Once Amended) The intelligent service network of claim [13] 2, further comprising:
[a plurality of] another intelligent service network [components] component coupled to said switch controller.

15. (Cancelled).

16. (Once Amended) [An] The intelligent service network of claim 1, further comprising:

[one or more] another switch [controllers] controller; and

one or more intelligent service network components coupled to at least one of said [one or more] switch controllers.

17. (Once Amended) [A] The intelligent service network of claim 1, further comprising:

[a plurality of] another programmable [switches] switch; and

[a plurality of] another switch [controllers] controller,

wherein each of said [plurality of] switch controllers is coupled to at least one of said [plurality of said] programmable switches.

18. (Once Amended) [An] The intelligent service network [environment] of claim 1, further comprising:

[one or more] another programmable [switches] switch coupled to a public [switch] switched telephone network, wherein said public [switch] switched telephone network is coupled to a calling device;

[one or more] another switch [controllers] controller, wherein each of said [one or more] switch controllers is coupled to at least one of said [one or more] programmable switches; and

one or more intelligent service network components, wherein each of said one or more intelligent service network components is coupled to at least one of said [one or more] switch controllers.

19. (Once Amended) The intelligent service network [environment] of claim 18, further

comprising:

one or more external networks and resources, wherein each one of said one or more external networks and resources is coupled to at least one of said one or more intelligent service network components.

30. (New) A communication system for providing telecommunication services, comprising:

a switch configured to process a call received from a telephony network according to program instructions; and

a switch controller configured to generate the program instructions to the switch for distributing the call to a plurality of network components based on availability of the network components, wherein the network components and the switch controller are connected over a common data network.

31. (New) A system according to claim 30, wherein the plurality of network components include an intelligent peripheral configured to provide one of operator services, and voice response services based on the received call.

32. (New) A system according to claim 30, wherein the plurality of network components include a network information distribution system configured to access data including one of customer account information, call routing information, and prepaid call information in response to the received call.

33. (New) A system according to claim 30, wherein the plurality of network components

include a protocol converter configured to converting protocols of an external resource to a protocol compatible with the data network.

34. (New) A system according to claim 30, wherein the plurality of network components include a management system configured to provide one of work force management, provisioning of resources, and configuration of the resources.

35. (New) A method for processing a call in a telecommunications system including a plurality of network components communicating with a switch that is capable of being programmed and having a plurality of ports, the method comprising:

transmitting program instructions to the switch for answering a call received by the switch from a telephony network and for selectively distributing the call to one of the ports corresponding to the network components based on availability of the network components, wherein the network components have connectivity to a common data network.--.